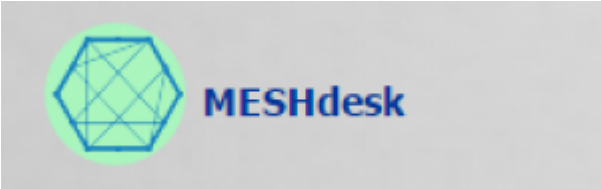
Creating a simple Mesh

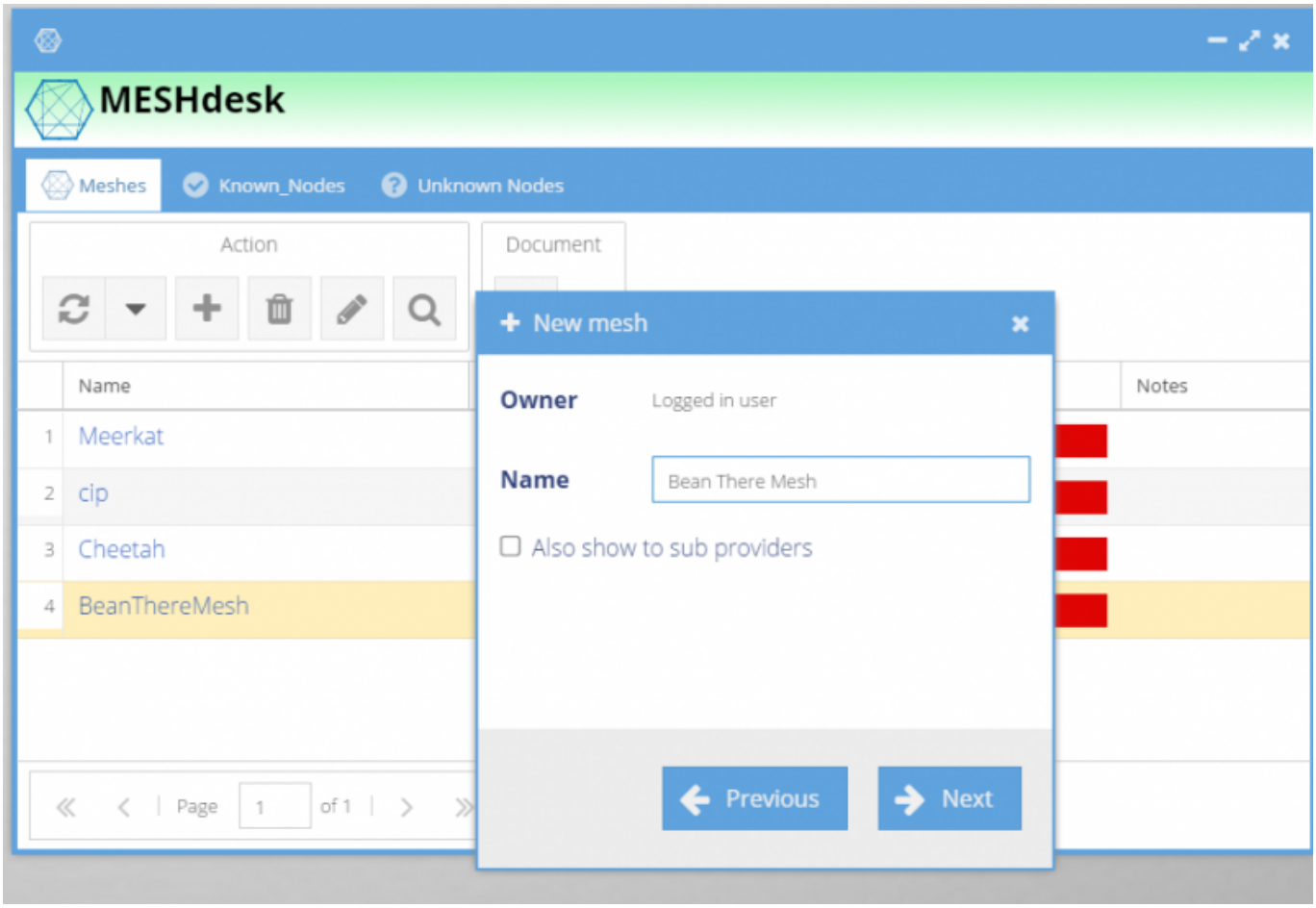
Once you have flashed and pointed your devices to your Radiusdesk Server as explained here , you can now pull these devices into a mesh. In this tutorial we will set up a simple mesh without a captive portal that requires usernames and passwords.

Add a New Mesh

- Click on the MESHdesk icon on the Radiusdesk home page.

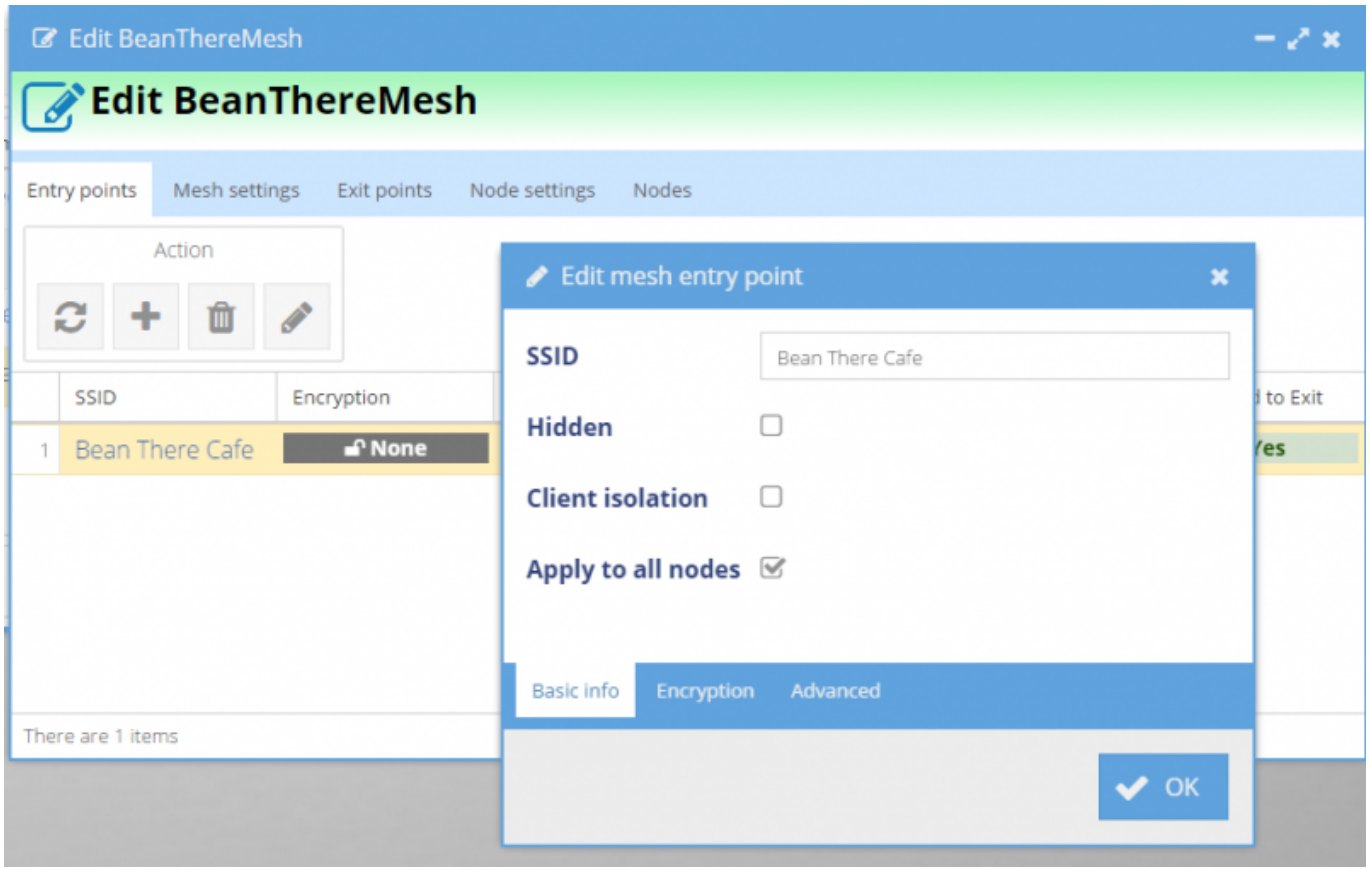


- Click the Add button in the actions toolbar. A New Mesh window opens.



- Select yourself (loggedin user) as the owner of the Mesh and click NEXT
- Give a name to the Mesh you are creating. We will use Bean There Mesh as a sample.
- Click NEXT. The Mesh is now created.

- Click on the Bean There Mesh in the MESHdesk window and click on Edit in the Action Toolbar.
- Look at the tabs in the Edit window. We will follow the tabs to set up the details of the Mesh.

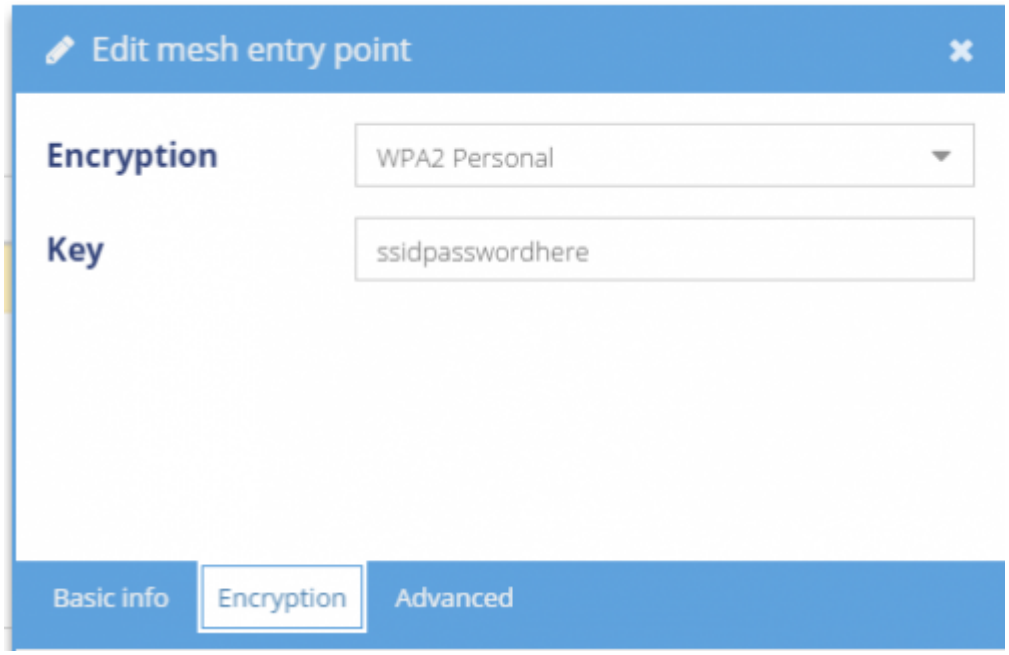


Add an Entry Point

An Entry Point will allow users to enter onto the Mesh network.

- Click on the Entry Points Tab in the Edit Mesh Window.
- Click Add on the Actions Toolbar in the Entry Points Tab. A New Entry Point window opens.
- Fill in a Name for the SSID, example Bean There Wifi.
- If you want the WiFi to be hidden to the public then select the Hidden tickbox.
- Select Client isolation tick box so that users cannot connect to each others' devices.
- **Or** deselect the Client Isolation tick box in an office where users must be able to print to a wireless printer.
- Select Apply to all nodes to make sure the SSID is available over the whole mesh.
- Click OK.

Encryption- to give the mesh a password



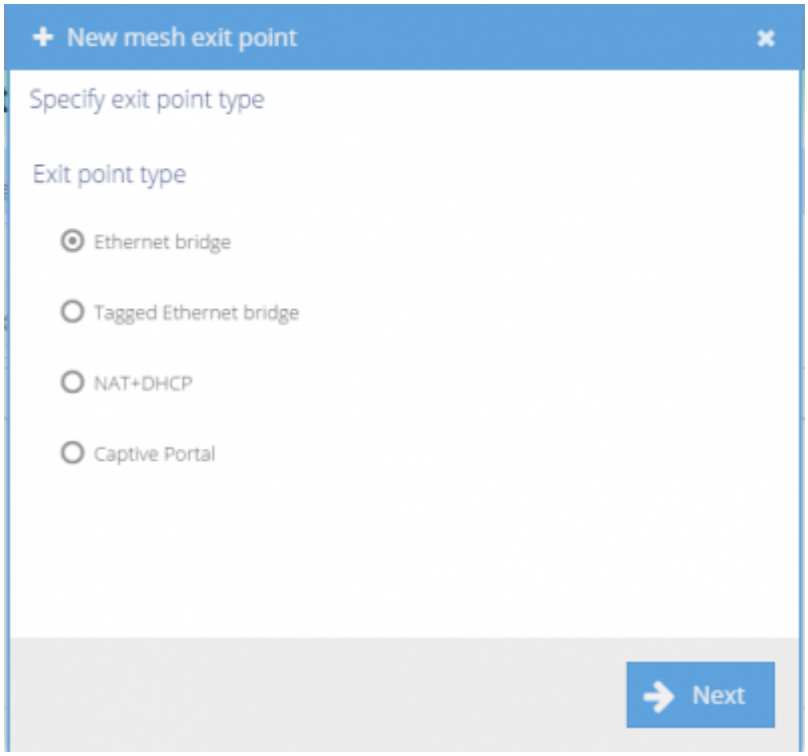
- Click on the Encryption sub-tab in the EditMesh Entry Port Window.
- Select **None** if you want users to login without giving a password.
- Select **WPA2 Personal** and supply an **8 letter password** if you want to secure the Wifi.

We suggest you leave the Mesh Settings and Batman Adv Settings on default

Add Exit Points

An Exit Point allows users from the Mesh Network onto the world wide web.

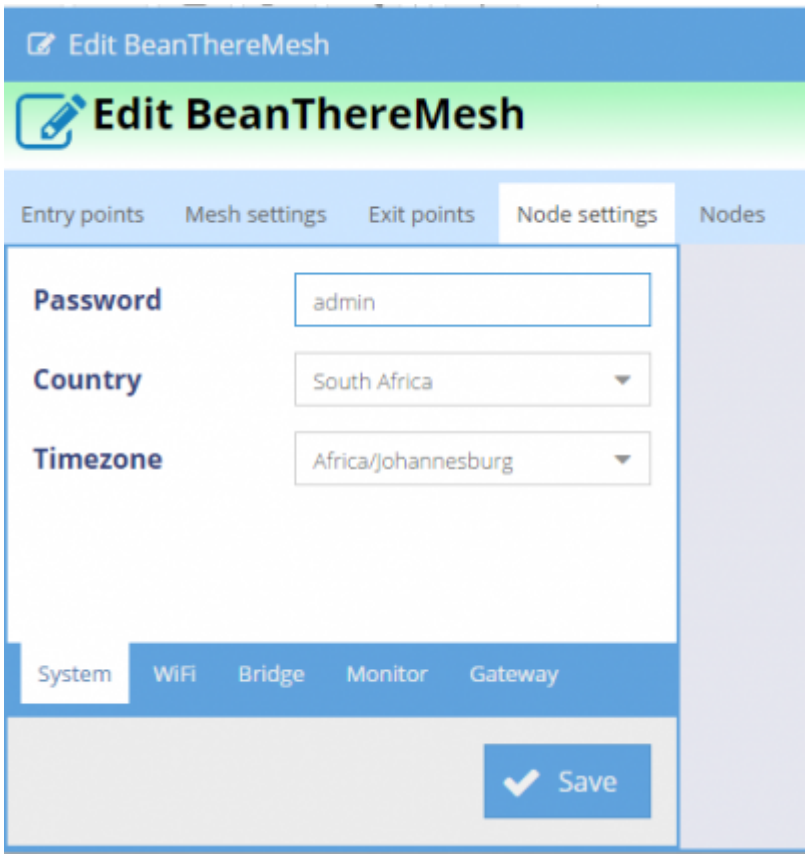
- Click on the Exit Points tab



- Select the type of Exit Point you have onto the internet.
  - Select the Ethernet Bridge button if you have an Ethernet cable supplying internet.
  - Select the Tagged Ethernet Bridge if your Ethernet connection gives a VLAN number.
  - Select NAT + DHCP if you connect to a DHCP server.
- We will cover the Captive Portal in the next How To.
- We will keep our selection on **Ethernet bridge** for this How To.
- Click NEXT

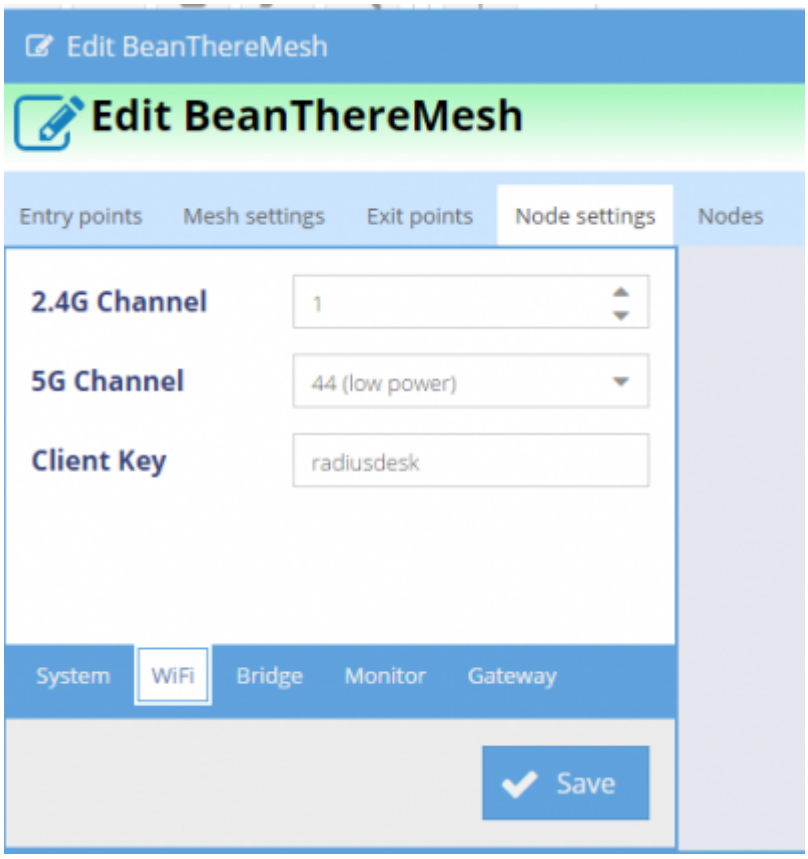
Node Settings- VERY IMPORTANT

- Click on the Node Settings Tab in the Edit Mesh Window.
- Under the Node settings Tab we will cover two sub-tabs: System and Wifi.



- In the System sub-tab:
- Fill in the Root User/ Top Level Access Provider Password into the Password field. This gives you access to the router/node.
- Select the country where the router/node is installed.
- Select the Time Zone of that location. This is EXTREMELY IMPORTANT as this timing is used for all the accounting of data.

* Click on the WiFi sub-tab



- In the 2.4 Channel field we suggest you leave the counter on 1. If your country does not allow 1 then try 6 or 11.
- In the 5 Channel field we suggest you leave the power on 44(low power).
- Click SAVE

Add the Nodes to your Mesh

You can add a node to your mesh by clicking on the **Nodes tab** in the Edit Mesh window and filling in a known MAC address **or** take the automated route by following these instructions:

Add the nodes to the Mesh on Meshdesk